BRUHAT BANGALORE MAHANAGARA PALIKE
BYATARAYANPURA SUB-DIVISION

Name of Work: Package 6, includes 3 works of 100.00 Lakhs

1. Improvements to Drains and Asphalting roads at Ashwath nagar SLV Apartment road near HP Gas Godown in Ward No.06 (Thanisandra), Byatarayanapura Sub Division

DETAILED-MEASUREMENT

FIRST & PART BILL

TEJUS CONSULTANTS
CONSULTING ENGINEERS AND DESIGNERS
No.58 MIG, 6th Cross, 3rd Main
1st Stage, Basaveshwaranagar
Bangalore-560079
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Bruhat Bengaluru Mahanagara Palike

Bytarayanapura Division

Bill No :1st & Part Bill

Name of Agency :- Benaka Developers & Project Pvt.Ltd.

Name of Work :- Improvements to Road and Asphalting roads at Ashwarth nagar SLV Apartment road near HP Gas Godown in Ward No.06(Thanisandra), Byatarayanapura Sub Division

BOQ Item	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks / Unit	Rate	Amount
6	KSRRB M300-14. Excavation for roadwork in soil with hydraulic excavator of 0.9 cum bucket capacity including cutting and loading in tippers, trimming bottom and side slopes, in accordance with requirements of lines, grades and cross sections, and transporting to the embankment location and complete as per specifications.											
	Measurements recorded on											
	Qty vide Pre measurement sheet page no . 1							**Total Quantity**	692.63	Cum	160.48	1,11,153.00
7	KSRRB M400-6.2 Construction of granular sub-base by providing close graded crushed stone aggregates of granite / trap / basalt material, mixing in a mechaical mix plant at OMC, carriage of mixed material to work site, spreading in uniform layers with motor grader on prepared surface and compacting with vibratory power roller to achieve the desired density, complete as per specifications											
	Measurements recorded on											
	Qty vide Pre measurement sheet page no . 162							**Total Quantity**	253.22	Cum	1796.48	4,54,905.00
8	M400-17. Providing, laying, spreading and compacting crushed stone aggregates of granite / trap / basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications											
	Measurements recorded on											7,99067
	Qty vide Pre measurement sheet page no .							**Total Quantity**	418.93	Cum	1907.40	7,99,060.00
9	KSRRB M 500-6, Providing and applying primer coat with SS bitumen emulsion on prepared surface of granular Base such as WBM WMM including clearing of road surface and spraying primer at the rate of 0.60 kglsqm using mechanical means complete as per specifications. As per MORTH specification clause No. 502 (P.No.161, I.No.21.6 of PW,P&IWTD SR 2016-17)											
	Measurements recorded on											
	Qty vide Pre measurement sheet page no .							**Total Quantity**	1675.71	Sq-m	32.02	53,656.00
11	KSRRB M500-7 : Providing and applying tack coat using 80/100 grade bitumen (VG10) on prepared black topped surfaces at 2.5 Kg per 10 sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH / Chapter 5 (P.No.161 I.No.21.7 of PW,P&IWTD SR of 2016-17)											
	Measurements recorded on											
	Qty vide Pre measurement sheet page no .							**Total Quantity**	1675.71	Sq-m	13.72	22,991.00

TEJUS CONSULTANTS — Tejus Consultants

BENAKA DEVELOPERS AND PROJECTS PVT LTD — Contractor

Assistant Engineer

Assistant Executive

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of Work :- Improvements to Road and Asphalting roads at Ashwarth nagar SLV Apartment road near Ward No.06(Thanisandra), Byatarayanapura Sub Division

BOQ Item	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks / Unit	Rate	Amount
12	KSRRB M500-19. Providing and laying bituminous concrete 30-40 mm compacted thickness with VG30 Bitumen grade using 40-60 HMP using crushed aggregates of grading II, premixed with bituminous binder at 5.4% of mix and filler, transporting the hot mix to work site, laying with a mechanical paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MoRT&H specification clause No. 500.9 complete in all respects as per specifications. MORTH Specification No. 509 (P.No.165 of I.No.21.22.6 in PW,P&IWTD S.R 2016-17)												
	SLV Royal apartment road												
	0.00	3.50		1	3.50	8.00	7.30	7.65	0.04	1.07			
	3.50	15.00		1	11.50	7.30	7.30	7.30	0.04	3.36			
	15.00	30.00		1	15.00	7.30	7.20	7.25	0.04	4.35			
	30.00	45.00		1	15.00	7.20	7.30	7.25	0.04	4.35			
	45.00	60.00		1	15.00	7.30	7.25	7.28	0.04	4.37			
	60.00	75.00		1	15.00	7.25	7.50	7.38	0.04	4.43			
	75.00	90.00		1	15.00	7.50	7.70	7.60	0.04	4.56			
	90.00	105.00		1	15.00	7.70	7.20	7.45	0.04	4.47			
	105.00	120.00		1	15.00	7.20	6.70	6.95	0.04	4.17			
	120.00	135.00		1	15.00	6.70	7.00	6.85	0.04	4.11			
	135.00	150.00		1	15.00	7.00	6.75	6.88	0.04	4.13			
	150.00	177.00		1	27.00	6.75	6.75	6.75	0.04	7.29			
	2nd C/s Road												
	0.00	15.00		1	15.00	5.65	5.40	5.53	0.04	3.32			
	15.00	39.00		1	24.00	5.40	5.90	5.65	0.04	5.42			
	1st c/s Road												
	0.00	2.60		1	2.60	4.70	5.60	5.15	0.04	0.54			
	2.60	15.00		1	12.40	5.60	5.60	5.60	0.04	2.78			
	15.00	34.00		1	19.00	5.60	5.80	5.70	0.04	4.33			
									Total Quantity	67.03	Cum	8645.07	5,79,463.00
13	KSRRB M800-13. Providing and laying of hot applied thermoplastic compound 2.5 mm thick including reflectorising glass beads at 250 gms per sqm area, thickness of 2.5mm is exclusive of surface applied glass beads as per IRC:35. The finished surface to be level, uniform and free from streaks and holes complete as per specifications. MORTH Specification No. 803.(P.No.185, I.No.24.15 of PW,P&IWTD SR 2016-												
	SLV Royal apartment road												
	Edge Line			2	177.00				0.10	35.40			
	2nd C/s Road												
	Edge Line			2	39.00				0.10	7.80			
	1st c/s Road												
	Edge Line			2	34.00				0.10	6.80			
									Total Quantity	50.00	Sqm	585.49	29,275.00
											Total Amount		20,50,503.00

Assistant Engineer 28.10.2024

Assistant Executiv

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BRUHAT BANGALORE MAHANAGARA PALIKE

BYATARAYANPURA SUB-DIVISION

Name of Work: Package 6, includes 3 works of 100.00 Lakhs

3. Improvements to Roads and Drains at Hegadenagar Eastern side 1st cross road to 8th cross road in Ward No.06 Byatarayanapura Sub Division

DETAILED-MEASUREMENT

FIRST & PART BILL

TEJUS CONSULTANTS
CONSULTING ENGINEERS AND DESIGNERS
No.58 MIG, 6th Cross, 3rd Main
1st Stage, Basaveshwaranagar
Bangalore-560079
☎ 080 - 23287632
email: tejusconsultants@gmail.com

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Detailed Measurements

Bruhat Bengaluru Mahanagara Palike

Bytarayanapura Division

Bill No :1st & Part Bill

Name of Agency :- Benaka Developers & Project Pvt.Ltd.

Name of Work :- 3) Improvements to Roads and Drains at Hegadenagar Eastern side 1st cross road to 8th cross road in Ward No.06 Byatarayanapura Sub Division.

SOQ Item	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks / Unit	Rate	Amount
1	KSRRB 300-2. Earthwork excavation by manual means in hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5 m, excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications.											
	Measurements recorded on											
	Qty vide Pre measurement sheet page no . 162							**Total Quantity**	**242.14**	**Cum**	**201.65**	**48,827.00**
2	Removing and refixing stone slabs of drains and pointing in CM (1:3)											
	Cover Slab											
	New Shanthinagar 1st Cross Road											
	LHS											
	0.00	9.00		1	9.00			1.20	10.80	1.2 BS slab		
	12.00	23.00		1	11.00			1.20	13.20	1.2 BS slab		
	32.00	53.00		1	21.00			1.20	25.20	1.2 BS slab		
	New Shanthinagar 2nd Cross Road											
	LHS											
	0.00	9.00		1	9.00			1.20	10.80	1.2 BS slab		
	24.00	39.00		1	15.00			1.20	18.00	1.2 BS slab		
	48.00	53.00		1	5.00			1.20	6.00	1.2 BS slab		
	New Shanthinagar 3rd Cross Road											
	LHS											
	0.00	20.00		1	17.00			0.90	15.30	0.9 BS Slab		
	47.00	61.00		1	6.00			0.90	5.40	0.9 BS Slab		
	RHS											
	0.00	15.00		1	15.00			1.20	18.00	1.2 BS slab		
	15.00	30.00		1	15.00			1.20	18.00	1.2 BS slab		
	30.00	45.00		1	15.00			1.20	18.00	1.2 BS slab		
	45.00	55.00		1	10.00			1.20	12.00	1.2 BS slab		
	New Shanthinagar 4th Cross Road											
	LHS											
	0.00	15.00		1	15.00			0.90	13.50	0.9 BS Slab		
	15.00	30.00		1	15.00			0.90	13.50	0.9 BS Slab		
	30.00	45.00		1	15.00			0.90	13.50	0.9 BS Slab		
	45.00	56.00		1	11.00			0.90	9.90	0.9 BS Slab		
	RHS											
	0.00	15.00		1	15.00			1.20	18.00	1.2 BS slab		
	15.00	30.00		1	15.00			1.20	18.00	1.2 BS slab		
	30.00	45.00		1	15.00			1.20	18.00	1.2 BS slab		

CHECKED 13/8/2021

275.10

Tejus Consultants

Contractor

13.08.2021

Assistant Engineer

Assistant Executive Engineer

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Detailed Measurements

Name of Work :- 3) Improvements to Roads and Drains at Hegadenagar Eastern side 1st cross road to 8th cross road in Ward No.06 Byatarayanapura Sub Division.

BOQ Item	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks / Unit	Rate	Amount
	45.00	55.00		1	10.00			1.20		12.00	1.2 BS slab		
	55.00	61.00		1	6.00			1.20	19.20	7.20	1.2 BS slab		
								TOTAL		294.30	Sqm	86.91	25,578.00
4	KSRB 4-1.2 : Providing and laying in position plain cement concrete of mix 1:3:6 with OPC cement @ 220kgs, with 40mm and down size graded granite metal coarse aggregates @0.892cum and fine aggregates @ 0.465cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation including cost of all materials, labour, HOM of machinery, curing complete as per specifications												
Measurements recorded on 3 to 6													1,96 881.00
	Qty vide Pre measurement sheet page no .								Total Quantity	34.12	Cum	5770.24	1,96,858.00
5	Providing and fixing RCC Precast cover slab of 250mm thick for drain in cement concrete M20 using graded granite jelly 20mm and down size with steel reinforcement, including form work, lift charges, curing and concrete finished surfaces on both sides etc, complete and as per drawing and the directions of Engineer in-charge.												
	New Slab												
	Culvert-1 (Bharath Nagar Fathima		1	9.00				1.50		13.50			
	Culvert-2 (khanqah Road, Fathima Layout)		1	7.80				1.80		14.04			
									Total Quantity	27.54	Sqm	5735.98	1,57,969.00
14	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications												
Measurements recorded on 6 to 7													4 96 621.00
	Qty vide Pre measurement sheet page no .								Total Quantity	102.47	Cum	4787.95	4,90,597.00
15	KSRB 5-11 : Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing complete as per specifications												
Measurements recorded on 8 to 9													
	Qty vide Pre measurement sheet page no .								Total Quantity	186.60	Sq-m	1037.18	1,93,538.00

Tejus Consultants

Contractor

Assistant Engineer

Assistant Executive Engineer

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Name of Work :- 3) Improvements to Roads and Drains at Hegadenagar Eastern side 1st cross road to 8th cross road in Ward No.06 Byatarayanapura Sub Division.

BOQ Item	Description / Chainage	Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks / Unit	Rate	Amount
16	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications											
	Measurements recorded on											
	Qty vide Pre measurement sheet page no . 9 to 11							Total Quantity	225.36	Sq-m	110.92	24,997.00
17	KSRB 4-1.6 ; Providing and laying in position plain cement concrete of mix 1:2:4 with cement @ 240kgs, with 20mm and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregtes @ 0.459cum, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, plinth and cills, ncluding cost of all materials, labour, HOM of machinery, curing complete as per specifications											
	Measurements recorded on											
	Qty vide Pre measurement sheet page no . 11 to 14							Total Quantity	24.16	Cum	6221.94	1503220= 1,50,297.00
18	Providing and Fixing Pre cast covering Slab 100mm thick made out of CC, jelly 20mm Down size with steel reinforcement including form work,curing,including cost of alll materials, labour,hire charges of machinery, loading, unloading, lead and lift,transportation etc ,complete.As per Engineer incharge. (Data Rate)											
	0.9m Slab											
	New Shanthinagar 1st Cross Road											
	9.00	12.00		1	3.00			0.90	2.70	0.9 New PCS		
	23.00	32.00		1	9.00			0.90	8.10	0.9 New PCS		
	53.00	66.00		1	13.00			0.90	11.70	0.9 New PCS		
	New Shanthinagar 2nd Cross Road											
	LHS											
	9.00	24.00		1	15.00			0.90	13.50	0.9 New PCS		
	39.00	48.00		1	9.00			0.90	8.10	0.9 New PCS		
	53.00	66.00		1	13.00			0.90	11.70	0.9 New PCS		
	New Shanthinagar 2nd Cross Road											
	LHS											
	20.00	47.00		1	27.00			0.90	24.30	0.9 New PCS		
	RHS											
	55.00	61.00		1	6.00			0.90	5.40	0.9 New PCS		
	New Shanthinagar 4th Cross Road											
	LHS											
	56.00	61.00		1	5.00			0.90	4.50	0.9 New PCS		
									90.00			

Tejus Consultants

Contractor

Assistant Engineer

Assistant Executive Engineer

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Name of Work :- 3) Improvements to Roads and Drains at Hegadenagar Eastern side 1st cross road to 8th cross road in Ward No.06 Byatarayanapura Sub Division.

BOQ Item	Description / Chainage		Side	Nos	L	B1	B2	Avg width	Depth	Quantity	Remarks / Unit	Rate	Amount
	New Shanthinagar 5th Cross Road												
	LHS												
	0.00	15.00		1	15.00			0.90		13.50	0.9 New PCS		
	15.00	30.00		1	15.00			0.90		13.50	0.9 New PCS		
	30.00	45.00		1	15.00			0.90		13.50	0.9 New PCS		
	45.00	59.00		1	14.00			0.90		12.60	0.9 New PCS		
	RHS												
	0.00	15.00		1	15.00			0.90		13.50	0.9 New PCS		
	15.00	30.00		1	15.00			0.90		13.50	0.9 New PCS		
	30.00	45.00		1	15.00			0.90		13.50	0.9 New PCS		
	45.00	60.00		1	15.00			0.90		13.50	0.9 New PCS		
	60.00	63.00		1	3.00			0.90	109.80	2.70	0.9 New PCS		
								TOTAL		199.80	Sqm	1960.18	3,91,644.00
											Total Amount		16,80,305.00

16,80,377.00

Tejus Consultants

Contractor

Assistant Engineer

Assistant Executive Engineer

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